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(54) Title: A SURGICAL KIT FOR HEMIARTHROPLASTY HIP REPLACEMENT

(57) **Abstract:** The present invention concerns apparatus and methods for hip refurbishment / replacement and in one aspect provides a kit comprising a femoral head and reamer. The present invention also provides apparatus and methods for minimally invasive surgery on a hip or similar (eg shoulder) joint. The kit is suited for performing a hip hemiarthroplasty, in which a femoral head is fitted directly into a socket reamed into the acetabulum without any permanent liner or prosthetic acetabular being implanted. The reamer is used to ream out the acetabulum until cancellous bone is exposed so that it bleeds liquid containing stem cells. By selecting the size of the femoral head in accordance with the characteristics of the patient, the pressure imposed on the liquid/ synovial fluid of the joint is in the range between 0.5 and 2MPa. This causes the stem cells to produce new cartilage between the bone and femoral head.